

Please replace the paragraph beginning at page 2, line 35, with the following rewritten paragraph:

The present invention provides peptide analogues comprising at least 7 amino acids selected from residues 86 to 99 of human myelin basic protein (SEQ ID NO:3) in which either L-lysine at position 91, L-threonine at position 95, or L-arginine at position 97 is altered to another amino acid. In one embodiment, L-lysine at position 91 is altered and one to three additional L-amino acids selected from residues 86, 87, 88, 95, 98 or 99 are altered to another amino acid. In a second embodiment, L-threonine at position 95 is altered and one to three additional amino acids selected from residues 86, 87, 88, 91, 98 and 99 or 86, 87, 88, 97, 98, and 99 are altered to another amino acid. In a third related embodiment, L-arginine at position 97 is altered and one to three additional amino acids selected from residues 86, 87, 88, 95, 98 or 99 are altered to another amino acid. The peptide analogues preferably contain double or triple alterations. In preferred aspects of the invention, the peptide analogues have altered residues 91, 95 or 97 to alanine and the additional amino acids are altered to the corresponding D-form amino acid.

Please replace the paragraph beginning at page 3, line 12, with the following rewritten paragraph:

In other embodiments, peptide analogues comprise at least seven amino acids selected from residues 86 to 99 of human myelin basic protein (SEQ ID NO:3) in which either L-lysine at position 91, L-threonine at position 95, or L-arginine at position 97 is altered to another amino acid, and in addition the N-terminal and C-terminal amino acids are altered in order to reduce proteolysis upon administration of the peptide analogue. In a preferred aspect, the N- and C-terminal amino acids are of the D-form.

Please replace the paragraph beginning at page 3, line 18, with the following rewritten paragraph:

In other embodiments, the peptide analogues comprise at least seven amino acids selected from residues 86 to 99 of human myelin basic protein (SEQ ID NO:3) in which either L-lysine at position 91, L-threonine at position 95, or L-arginine at position 97 is

residue 97 is altered, residue 91 may not be altered.

Please replace the paragraph beginning at page 3, line 25, with the following rewritten paragraph:

Other embodiments provide peptide analogues comprising at least seven amino acids selected from residues 86 to 99 of human myelin basic protein (SEQ ID NO:3) in which either L-lysine at position 91, L-threonine at position 95, or L-arginine at position 97 is altered to another amino acid. In preferred aspects, residue 91, 95 or 97 are altered to either alanine or the corresponding D-amino acid.

Please replace the paragraph beginning at page 3, line 34, with the following rewritten paragraph:

Further aspects of the present invention provide methods of treating multiple sclerosis by administering to a patient a therapeutically effective amount of a pharmaceutical composition comprising a peptide analogue comprising at least seven amino acids selected from residues 86 to 99 of human myelin basic protein (SEQ ID NO:3) in which residues 91, 95 or 97 are altered to another amino acid. Additionally, one to three additional amino acids may be altered or the N- and C-ends are altered to reduce proteolysis upon administration.

Please replace the paragraph beginning at page 4, line 12, with the following rewritten paragraph:

Figure 1 depicts DNA (SEQ ID NO:1) and predicted amino acid sequence (SEQ ID NO:2) for human myelin basic protein.

Please replace the paragraph beginning at page 5, line 28, with the following rewritten paragraph:

"Human myelin basic protein" ("MBP") refers to a protein found in the cytoplasm of human oligodendroglial cells. The nucleotide sequence and predicted amino acid sequence of human MBP are presented in Figure 1 (SEQ ID NOS: 1-2). Although not depicted in Figure 1, different molecular forms of human myelin basic protein generated by differential splicing or post-translational modification are also within the scope of this invention.

Paragraph:

As noted above, the present invention provides peptide analogues comprising at least 7 amino acids selected from residues 86-99 of human myelin basic protein (SEQ ID